CASE NO. C 07-06053 EDL

TABLE OF CONTENTS

2					Page
3	I.	INTR	ODUC	TION	1
4	II.	U.S. I	PATEN	T NO. 5,819,292	1
-		A.	"non-	-volatile storage means"	1
5			1.	The Term "Nonvolatile Storage Means" Is Presumptively A Means- Plus-Function Limitation.	1
7			2.	The Claims Do Not Recite Sufficient Structure To Rebut The Presumption That Section 112(6) Governs	2
8			3.	NetApp's Reliance On Dr. Brandt's Testimony Is Misplaced	
9			4.	The Use Of "Nonvolatile Storage" In The Other Cited Patents And Publications Is Irrelevant	6
10			5.	NetApp's Construction Is Incorrect Because It Captures Subject Matter Outside The Scope Of The '292 Patent	7
11			6.	NetApp's Criticisms Of Sun's Analysis Are Unfounded	8
12		B.	"meta	a-data for successive states of said file system"	9
			1.	NetApp Disregards The Language Of Claim 8	9
13			2.	Sun's Construction Is Consistent With The Dependent Claims	12
14			3.	Sun's Construction Gives Proper Weight To The Claim Language And The Specification	13
15		C.	"file	system information structure"	15
16			1.	Only Sun's Construction Is Consistent With Claim 4	15
17			2.	Only Sun's Construction Is Consistent With Claims 5, 6 And 7	16
18			3.	Only Sun's Construction Is Consistent With The Specification Viewed From The Perspective Of Ordinary Skill In The Art	16
19	III.	U.S. I	PATEN	T NO. 6,892,211	19
20		A.	"poin of blo	ting directly and indirectly to buffers in said memory and a second set ocks on said storage system"	19
21			1.	NetApp Rewrites Plain Claim Language	20
22			2.	The Claim Language Cited By NetApp Supports Sun's Construction	20
23			3.	NetApp's Construction Is Not Supported By The Specification	21
		B.	"root	inode"	22
24 25			1.	Any Distinction Between The Incore And On-Disk Root Inodes Is Irrelevant For Claim Construction	22
			2.	NetApp's Arguments Regarding The fsinfo Structure Are Irrelevant.	23
26			3.	NetApp's Construction Is Not Supported By The Specification	23
27			4.	Sun's Construction Recognizes True Scope Of Claimed Invention	25
28		C.	"state	of a file system" / "consistent state"	26
_0				_i_	

DLA PIPER US LLP

1

SUN'S REPLY CLAIM CONSTRUCTION BRIEF CASE NO. C 07-06053 EDL

	case 3	:07-cv-06053-EDL Document 125 Filed 08/01/2008 Page 3 of 41	
1		TABLE OF CONTENTS	
2		(continued)	Dogo
3	IV.	U.S. Patent No. 7,200,715	Page
	1 .	A. "associating the data blocks with one or more storage blocks across the	20
4 5		plurality of stripes as an association" / "the association to associate the data blocks with one or more storage blocks across the plurality of stripes"	28
_		1. The Claims Are Indefinite Under 35 U.S.C. §112(2)	28
6		2. NetApp's Arguments Confirm The Claims Are Indefinite	29
7		3. Sun's Alternative Construction Is The Only Construction Consistent With The Specification	31
8		4. The Prosecution History Supports Sun's Construction	32
9	V.	CONCLUSION	34
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
2223			
24			
25			
26			
27			
28			
		-ii-	

SUN'S REPLY CLAIM CONSTRUCTION BRIEF CASE NO. C 07-06053 EDL

1	TABLE OF AUTHORITIES
2	
3	Page CASES
4	Accumed LLC v. Stryker Corp.,
5	483 F.3d 800 (Fed. Cir. 2007)
6	AllVoice Computing PLC v. Nuance Communications, Inc., 504 F.3d 1236 (Fed. Cir. 2007)
7	Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336 (Fed. Cir. 2002)
89	Alloc, Inc. v. Int'l Trade Com'n, 342 F.3d 1361 (Fed. Cir. 2003)
10	Altiris, Inc. v. Symantec Corp., 318 F.3d 1363 (Fed. Cir. 2003)
11 12	Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313 (Fed. Cir. 2003)
13	Apple Computer v. Burst.com, Inc., 2007 WL 1342504 (N.D. Cal. May 8, 2007)
14 15	Bell Atlantic Network Servs. v. Covad Communications Group, Inc., 262 F.3d 1258 (Fed. Cir. 2001)
16	Biagro Western Sales, Inc. v. Grow More, Inc., 423 F.3d 1296 (Fed. Cir. 2005)24
17 18	Bicon Inc. v. Straumann Co., 441 F.3d 945 (Fed. Cir. 2006)
19	Boston Scientific SciMed, Inc. v. ev3 Inc., 502 F. Supp. 2d 931 (D. Minn. 2007)
20	Catch Curve. Inc. v. Venali. Inc
21	2007 WL 3308101 (C.D. Cal. May 11, 2007)
22	Cole v. Kimberly-Clark Corp., 102 F.3d 524 (Fed. Cir. 1996)
2324	Eaton Corp. v. Rockwell Int'l Corp., 323 F.3d 1332 (Fed. Cir. 2003)
25	Envirco Corp. v. Clestra Cleanroom, Inc.,
26	209 F.3d 1360 (Fed. Cir. 2000)
27	Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 93 F.3d 1572 (Fed Cir. 1996)
28	:::
D	-iii-

SUN'S REPLY CLAIM CONSTRUCTION BRIEF CASE NO. C 07-06053 EDL

1	TABLE OF AUTHORITIES
2	(continued) Page
3	Exxon Chem. Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553 (Fed. Cir. 1995)
45	Fin Control Sys. Pty, Ltd. v. OAM, Inc., 265 F.3d 1311 (Fed. Cir. 2001)21
6	General Creation LLC v. Leapfrog Enters., Inc., 232 F. Supp. 2d 661 (W.D. Va. 2002)
7 8	Geneva Pharms., Inc. v. GlaxoSmithKline PLC, 349 F.3d 1373 (Fed. Cir. 2003)
9	Globetrotter Software v. Elan Computer Group, 236 F.3d 1363 (Fed. Cir. 2001)
10 11	Greenberg v. Ethicon Endo-Surgery, 91 F.3d 1580 (Fed. Cir. 1996)
12	Halliburton Energy Serv., Inc. v. M-I, LLC, 514 F.3d 1244 (Fed. Cir. 2008)
13 14	Honeywell Int'l Inc. v. Int'l Trade Comm'n, 341 F.3d 1332 (Fed. Cir. 2003)
15	Honeywell Int'l Inc. v. ITT Indus., Inc., 452 F.3d 1312 (Fed. Cir. 2006)
16 17	Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111 (Fed. Cir. 2004)
18	Irdeto Access, Inc. v. Echostar Satellite Corp., 383 F.3d 1295 (Fed. Cir. 2004)
19 20	<i>J&M Corp. V. Harley-Davidson, Inc.</i> , 269 F.3d 1360 (Fed. Cir. 2001)
21	J.T. Eaton & Co. v. Atlantic Paste & Glue Co., 106 F.3d 1563 (Fed. Cir. 1997)
2223	Karlin Tech., Inc. v. Surgical Dynamics, Inc., 177 F.3d 968 (Fed. Cir. 1999)13
24	Keithley v. Homestore.com, Inc., 2007 WL 2701337 (N.D. Cal. Sept. 12, 2007)
2526	Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311 (Fed. Cir. 2004)6
27	Lottotron, Inc. v. Scientific Games Corp., 2003 WL 22075683 (S.D.N.Y. Sept. 8, 2003)
28	-iv-

1	TABLE OF AUTHORITIES
2	(continued) Page
3	MGP Ingredients, Inc. v. Mars, Inc., 494 F. Supp. 2d 1231 (D. Kan. 2007)
5	Mangosoft, Inc. v. Oracle Corp., 525 F.3d 1327 (Fed. Cir. 2008)
6	Merck & Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364 (Fed. Cir. 2005)
7 8	Miken Composites, LLC v. Wilson Sporting Goods Co., 515 F.3d 1331 (Fed. Cir. 2008)
9	nCube Corp v. SeaChange Int'l, Inc., 436 F.3d 1317 (Fed. Cir. 2006)26
10 11	Network Commerce, Inc. v. Microsoft Corp., 422 F.3d 1353 (Fed. Cir. 2005)24
12	Nomos Corp. v. BrainLAB USA, Inc., 357 F.3d 1364 (Fed. Cir. 2004)
13 14	Novo Indust., L.P. v. Micro Molds Corp., 350 F.3d 1348 (Fed. Cir. 2003)
15	Nystrom v. TREX Co., 424 F.3d 1136 (Fed. Cir. 2005)
16 17	O.I. Corp. v. Tekmar Co., 115 F.3d 1576 (Fed. Cir. 1997)
18	Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314 (Fed. Cir. 2003)
19 20	On Demand Machine Corp. v. Ingram Indus., Inc., 442 F.3d 1331 (Fed. Cir. 2006)
21	Optimal Recreation Solutions, LLP v. Leading Edge Tech., Inc., 6 Fed. Appx. 873 (Fed. Cir. 2001)
2223	Ortho-McNeil Pharm. v. Mylan Labs., Inc., 520 F.3d 1358 (Fed. Cir. 2008)
24	Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005)
2526	<i>Quantum Corp. v. Rodime, Plc.</i> , 65 F.3d 1577 (Fed. Cir. 1996)
27	SanDisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278 (Fed. Cir. 2005)
28	-V-

1 2	TABLE OF AUTHORITIES (continued)
	Page
3	Schumer v. Lab. Computer Sys., 308 F.3d 1304 (Fed. Cir. 2002)
4	Signtech USA, Ltd. v. Vutek, Inc.,
5	174 F.3d 1352 (Fed. Cir. 1999)
6	Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570 (Fed. Circ. 1995)
7 8	Springs Window Fashions LP v. Novo Indust., L.P., 323 F.3d 989 (Fed. Cir. 2003)
9	Tandon Corp. v. U.S. Int'l Trade Com'n, 831 F.2d 1017 (Fed. Cir. 1987)
10	Unidynamics Corp. v. Automatic Prods. Int'l Ltd.,
11	157 F.3d 1311 (Fed. Cir. 1998)
12	United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 63 S.Ct. 165, 87 L.Ed. 232 (1942)30
13	
14	STATUTES
15	35 U.S.C. §112(2)
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
_0	-vi-

WEST\21484902.1

I. INTRODUCTION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

WEST\21484902.1

This reply brief addresses the construction of NetApp's United States Patent Nos. 5,819,292 (the "'292 patent"), 6,892,211 (the "'211 patent") and 7,200,715 (the "'715 patent").

II. U.S. PATENT NO. 5,819,292

"non-volatile storage means" Α.

The Term "Nonvolatile Storage Means" Is Presumptively A Means-1. **Plus-Function Limitation.**

Reciting the word "means" creates a rebuttable presumption the claim limitation is a means-plus-function limitation under section 112(6). Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1375 (Fed. Cir. 2003). NetApp attempts to sidestep this presumption by noting that not all claim terms reciting "means" ultimately are held to be means-plus-function limitations. However, while the use of "means" does not always result in the Court *ultimately* holding that section 112(6) governs, the use of "means" does create an initial presumption that the limitation is a means-plus-function limitation. Altiris, 318 F.3d at 1375. The legal authority cited by NetApp confirms this. Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1347 (Fed. Cir. 2002) ("[t]he use of the word 'means' triggers a presumption that the inventor used this term advisedly to invoke the statutory mandate for means-plus-function clauses").

NetApp also makes the unsupported assertion that "means" language does not invoke section 112(6) in method claims. This is incorrect. The Federal Circuit has construed a "means" term in a method claim as a means-plus-function limitation. See Eaton Corp. v. Rockwell Int'l Corp., 323 F.3d 1332, 1335-36, 1343 n. 1 (Fed. Cir. 2003); On Demand Machine Corp. v. Ingram Indus., Inc., 442 F.3d 1331, 1340-41 (Fed. Cir. 2006); J&M Corp. V. Harley-Davidson, Inc., 269 F.3d 1360, 1364 n. 1 (Fed. Cir. 2001).

NetApp's reliance on O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1582-83 (Fed. Cir. 1997) is misplaced. There, the Court did not state the use of "means" in a method claim does not invoke section 112(6). Indeed, NetApp cites no case so holding.

NetApp also repeatedly suggests, without citing case law, that reciting "means" without also reciting the word "for" precludes application of section 112(6). NetApp Response Brief

1 2

3

4 5

> 6 7

8 9

10 11

12 13

14 15

16 17

18

19

20

21

22

23 24

25

26

27

28

("NRB") at 2-3. This also is incorrect. The Federal Circuit routinely holds means-plus-function limitations exist where the word "for" is not used. See, e.g., Eaton, 323 F.3d at 1335-36, 1343, n. 1; Unidynamics Corp. v. Automatic Prods. Int'l Ltd., 157 F.3d 1311, 1318-19 (Fed. Cir. 1998); Signtech USA, Ltd. v. Vutek, Inc., 174 F.3d 1352, 1354-55 (Fed. Cir. 1999).

NetApp next argues that section 112(6) does not apply because, according to NetApp, the claims do not recite a function for the "nonvolatile storage means." NRB at 3. This argument is without merit. The expressly recited function of the "nonvolatile storage means" in claims 4 and 8 is to store, namely, to store data blocks of a file system (claims 4 and 8), to store first and second "file information structures" (claim 4), to store "read-only copies of a file system" (claim 8) and to store "metadata for successive states of said file system" (claim 8). '292 patent, col. 25:11-29, 26:1-15.

In light of the plain claim language, NetApp's assertion that the "non-volatile storage means" does not perform the recited function of "storing" is nonsense. The "nonvolatile storage means" stores data blocks, file information structures, read-only copies of the file system and meta-data. *Id.* Indeed, NetApp contradicts its argument that the "nonvolatile storage means" does not perform a function when it later argues that "every single dictionary definition the parties are aware of at least defines 'non-volatile storage' . . . in 'functional terms.'" NRB at 5.

NetApp's argument also is undermined by its own proposed claim construction, which defines "nonvolatile storage means" as a generic "device" "that can" perform the function of "retain[ing] information in the absence of power." Thus, NetApp proposes, on the one hand, that "nonvolatile storage means" be construed to cover any means for performing nonvolatile storage, yet, at the same time, in order to avoid section 112(6), also argues that the "nonvolatile storage means" does not perform storing. This double-talk, if anything, underscores the functional nature of the recited "nonvolatile storage means."

2. The Claims Do Not Recite Sufficient Structure To Rebut The **Presumption That Section 112(6) Governs.**

In order to rebut the presumption that section 112(6) governs a "means" limitation, the claim language itself must recite sufficient structure to perform the claimed function in its

entirety. Altiris, 318 F.3d at 1375. The claim language must recite a specific physical structure that performs the function. *Id.* at 1376. In the present case, however, the claims fail to recite any specific physical structure, much less sufficient structure, for performing the stated functions of the "nonvolatile storage means."

NetApp does not deny that the claim language surrounding the recited "nonvolatile storage means" fails to identify any structure to perform the claimed functions. Rather, NetApp asserts the term "nonvolatile storage" itself has a reasonably well-understood meaning in the art and, therefore, according to NetApp, section 112(6) does not govern. NRB at 4-6. This argument ignores that the term "nonvolatile storage" describes a *function* and not specific physical structure that performs the claimed function in its entirety. Brandt Supp. Decl., ¶ 1; *see Altiris*, 318 F.3d at 1376. As explained by Dr. Brandt, the term "nonvolatile storage" does not define any particular physical structure or class of devices for performing the recited function to one of ordinary skill in the art. Brandt Supp. Decl., ¶ 1. Accordingly, because "nonvolatile storage" does not connote a specific physical structure, NetApp cannot rebut the presumption that section 112(6) applies to the "nonvolatile storage means" limitation.

NetApp asserts "the bar is low" "[i]n determining whether a claim term recites sufficient structure" to defeat the presumption that section 112(6) governs. NRB at 4. NetApp cites no case so stating, and no case so holds. Rather, the authority cited by NetApp states the issue is whether the claim term, "as the name for structure," has a reasonably well-understood meaning in the art. *Allen Eng'g*, 299 F.3d at 1347. Note the standard is not whether the recited function of the claim term is clear, but rather whether the claim term is itself a "name" for "structure," and whether that named structure is well-understood in the art.

NetApp generally points to dictionary definitions in asserting that "nonvolatile storage" is a "name" for a structure well-understood in the art. However, half the definitions cited by NetApp define "nonvolatile memory" rather than "nonvolatile storage." NRB at 4; Ganger Decl., ¶ 12. And many of the definitions of "nonvolatile storage" NetApp does cite merely define the phrase in terms of *the function* performed by a generic "device" for which no structure is identified. *See, e.g.*, Ganger Decl., ¶ 12 (citing *IEEE Standard Dictionary of Electrical and*

-3-

Electronics Terms ["a storage device which can retain information in the absence of power"], Prentice Hall's Illustrated Dictionary of Computing ["a storage device whose contents are not lost when the power is cut-off"]). As such, one cannot conclude from the cited dictionaries that "nonvolatile storage" is a "name for structure" well-understood in the art.

NetApp notes that a few dictionary definitions also cite either "magnetic tape," ROM, "bubble memory" or "magnetic core storage" as "nonvolatile storage" (although the list varies from definition-to-definition). Ganger Decl, ¶ 12. Significantly, however, none of the definitions identify hard disk drives, the sole relevant structure discussed in the specification of the '292 patent, as "nonvolatile storage." The fact that hard disk drives are not identified in any of these definitions confirms the dictionaries do not evidence that "nonvolatile storage," as used in the '292 patent, is the "name" of a relevant "structure" well-understood in the art.

NetApp's heavy reliance on the *Greenberg* case is inappropriate as NetApp fails to advise the Court of an important distinction drawn in that case. In *Greenberg*, the Federal Circuit held the term "detent mechanism" – a term that does not use "means" language – was not a meansplus-function limitation. *Greenberg v. Ethicon Endo-Surgery*, 91 F.3d 1580, 1583 (Fed. Cir. 1996). In its analysis, the Federal Circuit contrasted the term "detent *mechanism*" with the term "detent *means*," which was held to be a means-plus-function limitation in an earlier case. *Id.* at 1584 (citing *Interspiro USA Inc. v. Figgie Int'l Inc.*, 815 F. Supp. 1488, *aff'd*, 18 F.3d 927, 930-31 (Fed. Cir. 1994)). A critical distinction the Court drew between the term "detent mechanism" in *Greenburg* and the term "detent *means*" in *Interspiro* was that the patentee in *Interspiro* chose to invoke section 112(6) by claiming in means-plus-function format. *Id.* Here, like the "detent means" in *Interspiro*, "nonvolatile storage means" is claimed in mean-plus-function format.

The other cases cited by NetApp also are inapposite. In *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524 (Fed. Cir. 1996), the claims included "a detailed recitation of [the claim term's] structure." *Id.* at 531. In *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360 (Fed. Cir. 2000), the Court similarly concluded "the claims recite sufficient structure, including details about the location and formational details about the second baffle." *Id.* at 1365 ("the claims describe the particular structure of this particular baffle"). Likewise, in *Keithley v.*

4-

Homestore.com, Inc., 2007 WL 2701337 (N.D. Cal. Sept. 12, 2007), the Court found the "corresponding structure . . . is evident" from the surrounding claim language. Id. at *20. No such "detailed recitation," "particular[ized] structure" or "corresponding structure" – or any structure for that matter – is present in the claims of the '292 patent.

NetApp also relies upon the Southern District of New York ruling in *Lottotron, Inc. v. Scientific Games Corp.*, 2003 WL 22075683 (S.D.N.Y. Sept. 8, 2003), which addressed the term "storage means." As an initial matter, claim terms must be evaluated within the context of the patent in which they are found. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Accordingly, it is not surprising that claim terms are assigned different constructions in different patents involving different technology.

The holding in *Lottotron* regarding "storage means" is not persuasive authority regarding "nonvolatile storage means" for several additional reasons. First, the two terms are not the same. Second, the "storage means" in *Lottotron* involved a completely different technical context – the patent in *Lottotron* involved a lottery wagering system, not the file systems of the '292 patent. *Lottotron*, 2003 WL 22075683 at *1. Third, *neither* party in *Lottotron* contended the claimed "storage means" was a means-plus-function limitation. *Id.* at *7. Fourth, while NetApp cites *Lottotron*, it ignores three other District Court cases holding that "storage means" is a meansplus-function limitation. *Catch Curve, Inc. v. Venali, Inc.*, 2007 WL 3308101 (C.D. Cal. May 11, 2007) ("mass storage means"); *Apple Computer v. Burst.com, Inc.*, 2007 WL 1342504, *21-22 (N.D. Cal. May 8, 2007) ("storage means"); *General Creation LLC v. Leapfrog Enters., Inc.*, 232 F. Supp. 2d 661, 674-78 (W.D. Va. 2002) ("memory storage means"). In *Apple*, this Court concluded: "[T]he description of storage as a 'memory device' underscores the conclusion that 'storage' is a functional term. A memory device does not connote a particular structure . . ." *Apple*, 2007 WL 1342504 at *21 (citations omitted). The Court's conclusion in *Apple* is the same as Sun's position here.

3. NetApp's Reliance On Dr. Brandt's Testimony Is Misplaced.

NetApp asserts the declaration testimony of Dr. Brandt supports NetApp's argument that "nonvolatile storage means" is a name for structure well-understood in the art. NRB at 6-7.

-5-

However, the testimony relied upon by NetApp (1) does not mention "nonvolatile storage" and (2) involves an analysis of the specification of the '292 patent. Brandt Decl., ¶¶ 101, 77-86. NetApp's reliance on testimony concerning conclusions drawn from the detailed teaching of the specification is, to say the least, ironic, as Sun's construction is premised upon the teaching of the specification, while NetApp seeks a construction completely unfettered by the teaching of the specification. Indeed, because reviewing the specification is required to give "nonvolatile storage means" meaning in the context of the claims, that term is not a "name" for "structure" well-understood in the art. *Altiris*, 318 F.3d at 1375-76.

4. The Use Of "Nonvolatile Storage" In The Other Cited Patents And Publications Is Irrelevant.

NetApp cites six Sun patents and two publications by Dr. McKusick that use the term "nonvolatile storage," some of which include examples of devices that can perform the function of nonvolatile storage. NRB at 6-8. Again, as an initial matter, none of these patents or publications is competent evidence of the understanding in the art at the time the application for the '292 patent was filed as they all post-date the filing. Moreover, the fact that one can provide examples of devices that can perform a function, such as "storage," does mean that the function connotes a specific physical structure that performs the function, thereby excluding it from the scope of section 112(6). For instance, one can provide examples of devices that can perform the function of storage, *e.g.*, disks, punch cards, paper, semiconductor memory devices, etc., yet, as established above, *three* different District Courts determined the term "storage means" is governed by section 112(6).

The cases cited by NetApp in connection with its citation to the Sun patents (and to Dr. Brandt's declaration testimony) are inapposite. To support its contention that this evidence "merely proves that the term [nonvolatile storage means] has a broad meaning, not that it is a means-plus-function limitation," NetApp first cites *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1322 (Fed. Cir. 2004). However, the cited passage in *Linear* does not stand for this proposition and, in fact, pertains to identifying the "corresponding structure" of a claim term that already was held by the Court to be governed by section 112(6). *Id.* NetApp next cites a

-6-

case the Federal Circuit did not designate as citable precedent, *Optimal Recreation Solutions*, *LLP v. Leading Edge Tech., Inc.*, 6 Fed. Appx. 873, 878 (Fed. Cir. 2001). Even if *Optimal* could be cited as precedent, the claim terms in *Optimal* were, unlike the "nonvolatile storage means," the names of structures. *Id.* NetApp also cites *Greenberg*, which, as established above, distinguished "detent means" (governed by section 112(6)) from "detent mechanism" (not governed by section 112(6)).

Moreover, none of the cases cited by NetApp alters the basic rule stated by the Federal Circuit in *Altiris* that the presumption that requires NetApp to identify a specific physical structure sufficient to perform the claimed function in its entirety. *Altiris*, 318 F.3d at 1375-76. In *Altiris*, the Court noted, in citing the *Envirco* and *Cole* cases discussed above: "In the cases where we have found sufficient structure in the claims, the claim language specifies a specific physical structure that performs the function." *Id.* at 1376. Thus, if, as is instead the case here, "one must still look to the specification for an adequate understanding of the structure," the claim term is governed by section 112(6). *Id.*

5. NetApp's Construction Is Incorrect Because It Captures Subject Matter Outside The Scope Of The '292 Patent.

NetApp criticizes Dr. Brandt for identifying examples of devices that perform nonvolatile storage that are outside of the scope the '292 patent. For example, Dr. Ganger states "Sun and Dr. Brandt go too far in suggesting that relevant 'non-volatile storage' includes things like 'paper' and 'film' simply because they retain data in the absence of power." Ganger Decl., ¶ 17. Dr. Ganger then states that certain devices that retain data in the absence of power, such as paper and film, are outside of the context of the '292 patent. Ganger Decl., ¶ 17. By admitting that not all devices that retain information in the absence of power should be considered "nonvolatile storage" in the context of the '292 patent, NetApp highlights the inherent problem with its proposed construction – it captures subject matter outside of the scope of the '292 patent.

Because NetApp's proposed construction of "nonvolatile storage means" – *i.e.*, "a storage device that can retain information in the absence of power" – covers subject matter, such as paper and film, that it admits is outside of the context of the specification or file history, it violates the

5

6 7

9 10

8

11

12

13

14 15

17

16

18 19

20 21

22

23 24

25

26

27

28

DLA PIPER US LLP

WEST\21484902.1

fundamental principles of *Phillips*. See Miken Composites, LLC v. Wilson Sporting Goods Co., 515 F.3d 1331, 1336-38 (Fed. Cir. 2008), quoting Nystrom v. TREX Co., 424 F.3d 1136, 1145-46 (Fed. Cir. 2005) ("broadening of the ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad meaning was intended violates the principles articulated in *Phillips*, 415 F.3d 1303 (Fed. Cir. 2005)").

6. NetApp's Criticisms Of Sun's Analysis Are Unfounded.

NetApp criticizes Sun's construction by arguing the stated function of the "nonvolatile storage means" is merely "storing information so that the information is not lost in the absence of power." NRB at 9. This assertion is incorrect because it disregards the other claim language identifying the specific functions of the nonvolatile storage means. As established both above and in Sun's opening brief, the claim language at a minimum discloses the function of storing blocks of data for a file system. Sun Br. at 9.

NetApp next argues that the "corresponding structure" in the specification identified by Sun is too narrow. This also is incorrect. Sun's proposed corresponding structure includes the only embodiment described in the specification for storing data blocks so that the data is not lost in the absence of power, i.e., one or more disks with a block-based format (i.e., 4 KB blocks that have no fragments) where the disk storage blocks are the same size as the data blocks of the file system. Sun Br. at 9-10. In fact, although the Court is required to identify the corresponding structure in the specification, and although NetApp challenges Sun's identification, NetApp never identifies where in the specification it contends the corresponding structure is located. *Omega* Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1321 (Fed. Cir. 2003).

Rather than citing corresponding structure in the specification as required, NetApp appears to contend the test is what structure an expert believes is minimally necessary to perform the recited function. NRB at 9. This is not the law – the focus of the inquiry is on the corresponding structure identified in the specification. *Omega*, 334 F.3d at 1321.

NetApp criticizes Sun for identifying as "corresponding structure" structures resulting from the use of WAFL. NRB at 10. However, identifying the corresponding structure in the context of WAFL is necessary because the specification *only* describes the invention in the

-8-

context of the structures imposed by WAFL. Brandt Decl., ¶ 67; '292 patent, col. 5:45-6:52,
6:53-8:56, 8:57-9:17, 9:18-11-27, 11:28-58, 11:62-17:63, 17:64-24:6. Fundamental to the
operation of WAFL is "a disk format system that is block based (i.e., 4 KB blocks that have no
fragments)." Brandt Decl., ¶ 67; '292 patent, col. 5:48-53. WAFL applies this format to the disk
so that it is prepared to store 4KB storage blocks corresponding to the 4KB data blocks. Brandt
Supp. Decl., ¶ 7. Thus, because Sun's construction describes the most basic structure of the
formatted disk, NetApp is incorrect in asserting that the "corresponding structure" in Sun's
proposed construction "do[es] not even pertain to a 'non-volatile storage' device." NRB at 10.
NetApp also criticizes Sun's construction because it does not identify all the requirements
of WAFL – such as WAFL inodes and directories – as corresponding structure. NRB at 10-11.

NetApp also criticizes Sun's construction because it does not identify all the requirements of WAFL – such as WAFL inodes and directories – as corresponding structure. NRB at 10-11. However, the use of "inodes" and "directories" is *not* inherently structural and is, therefore, not included in the minimally necessary corresponding structure. In contrast, the block-based disk format is inherently structural because it describes how the underlying disks are formatted. Brandt Supp. Decl., ¶ 7.

B. "meta-data for successive states of said file system"

1. NetApp Disregards The Language Of Claim 8.

Viewed from any perspective, Sun's construction is mandated by the language of claim 8 and the detailed description of the "present invention" in the specification. Sun Br. at 10-14. Indeed, because the requirements of the claim and the teaching of the specification are clear, NetApp is compelled to fabricate a non-existent distinction between the claim and Sun's construction, *i.e.*, that claim 8 concerns "consistency points" while Sun's construction concerns "snapshots." NRB at 12. This distinction – and NetApp's related arguments – are without merit.

The claim 8 phrase being construed is "meta-data for *successive* states of said file system." The word "*successive*" bears on the manner in which the file system recited in claim 8 transitions from one state of the file system to the next state of the file system. '292 patent, col. 4:6-11, 33-43. The *successive* states of a file system are the current state of the file system and past states of the file system, which may be recorded as "snapshots." Brandt Supp. Decl., ¶ 16; '292 patent, col. 17:66:18-1, 19:20-23, Fig. 18C. Claim 8 requires "*storing* meta-data for

WEST\21484902.1

successive states of the file system." Thus, contrary to NetApp's assertion that "the 'successive states of said file system' referred to here are consistency points, not snapshots" (NRB at 12), it is clear successive states of the file system refers to both the current state of the file system and snapshots of past states of the file system.

While NetApp accuses Sun of "confus[ing] a consistency point with a snapshot" (NRB at 12), it appears NetApp is the one that is confused. In this regard, while Sun's opening brief explains consistent states and snapshots in detail, with specific citation to the specification, NetApp draws its distinction without *any* specific citation to the specification. Sun Br. at 3-5; NRB at 12. Without repeating Sun's prior multi-page explanation, Sun notes, again, that the current "active" "consistent state" of the file system is defined by the most recent "consistency point." Brandt Supp. Decl., ¶ 18; '292 patent, col. 11:60-12:1, 14:42-44, 17:60-64. The file system can retain copies of past consistent states in a read-only form called "snapshots." '292 patent, col. 4:20-21, 17:64-18:3; Brandt Supp. Decl., ¶¶ 10, 16. A snapshot is similar to a past consistency point. *Id.*, col. 20:21-22, 64-65; Brandt Supp. Decl., ¶ 18.

NetApp correctly points out that not all consistency points are preserved as snapshots.

NRB at 12. However, the conclusion NetApp draws from this – that "Sun's definition fails because it does not encompass meta-data for any consistency points that are not preserved as snapshots – is clearly incorrect. *Id.* In this regard, the parties agree claim 8 consists of a single, three-step process, which claim 8 refers to as "[a] method for creating a plurality of read-only copies of file system," *i.e.*, snapshots. '292 patent, claim 8, col. 26:1-2. The first step in the claimed process is "storing meta-data for successive states of the file system"; the second step is "making a copy of said meta data" to create a snapshot; and the third step is marking the blocks identified by the copied meta-data as comprising the snapshot. *Id.*, col. 26:5-15. NetApp admits, as it must, that the second and third steps pertain to the creation of snapshots (NRB at 13:6-7), and storing the meta-data in the first step enables the creation of the snapshot in the second and third steps. '292 patent, col. 18:21-23; Brandt Supp. Decl., ¶ 10. Thus, this process, by its own terms, *pertains only to creating snapshots* of successive, current states of the file system.

Therefore, claim 8 does *not* pertain to instances where a consistency point is not saved as a -10-

snapshot. Accordingly, Sun's construction does not exclude any aspect of claim 8 – and NetApp's observation that not all consistency points are saved as snapshots is irrelevant.

NetApp ignores the use of the word "successive" in the claim when construing this limitation and its construction gives the word "successive" no weight. NetApp's disregard of "successive" leads to NetApp's failure to recognize the claim's requirement of a block map file. The block map file is the one and only element of the '292 patent that constitutes the claimed "meta-data for successive states of the file system." Sun Br. at 11-12. NetApp's construction improperly contradicts the patentee's repeated and unqualified statements establishing this. Honeywell Int'l, Inc. v. ITT Indus., Inc., 452 F.3d 1312, 1318-19 (Fed. Cir. 2006).

Instead of acknowledging the dictates of the intrinsic evidence, NetApp disassembles this claim term and eyes the word "meta-data" without regard to the remaining claim language – "for successive states of the file system." Having stripped it of context, NetApp posits the recited "meta-data" can be anything – "an inode file, a root inode, a block map file, an inode map file, inode tables, directories, bitmaps, and indirect block" – and, based on Dr. Ganger's supposition, any other unnamed structure. NRB at 13 (*citing* Ganger Decl., at ¶¶ 29-30). Tellingly, nowhere is there any mention of whether these structures relate to *successive states of a file system*. That is because only the block map file, among the boundless structures offered by NetApp, is the claimed "meta-data for successive states of the file system." Brandt Supp. Decl., ¶ 15.

NetApp's proposed construction also is inconsistent with the language of the claim as a whole. The final limitation of claim 8 recites: "for each of said copies of said meta-data at a respective state of said file system, marking said *blocks* of said non-volatile storage means *identified in said meta-data as comprising a respective read-only copy* of said file system." '292 patent, col. 26:11-16. Thus, the "meta-data" must identify blocks within each read-only copy of the file system. According to the '292 patent, the block map file is the unique meta-data that identifies blocks within each read-only copy. Brandt Supp. Decl., ¶ 14. Thus, once again, claim 8 dictates that the "meta-data for successive states of the file system" be the block map file, and not the generic "information" NetApp proposes.

NetApp's proposal to substitute generic, unbounded "information" for "meta-data for

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Circuit. Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 93 F.3d 1572, 1578 (Fed Cir. 1996). 2. Sun's Construction Is Consistent With The Dependent Claims.

successive states of the file system" is not supported by any intrinsic evidence – and NetApp cites

none. Furthermore, replacing the existing specific claim language with generic "information"

effectively deletes the "meta-data" limitation from the claim, a practice forbidden by the Federal

In an attempt to misapply the doctrine of claim differentiation, NetApp posits that claim 8 under Sun's construction excludes the narrowing limitations of claims 11-13 and 18-19. NRB at 13-14. The obvious flaw in NetApp's argument is that Sun's construction of "meta-data for successive states of a file system" *does not exclude* the presence of the additional limitations recited in the dependent claims, such as "pointers," "inodes" or "root inodes." '292 patent, col. 26:26-32, 26:50-55. Indeed, NetApp's brief never explains how Sun's construction would preclude the presence of these features in the practice of claim 8. In any event, claim 8 is an open "comprising" claim, so the requirement of a "block map file for recording snapshots of the file system" does not exclude the presence of additional structures. SanDisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278, 1284-85 (Fed. Cir. 2005) (confirming that "comprising" is synonymous with "including" and that "comprising" claims do not foreclose the presence of additional elements).

NetApp's argument appears to be based upon the assumption that the use of a "block map file" somehow precludes, from a technical perspective, the presence of the "pointers" and "inodes" of the dependent claims. They do not, nor is one an alternative to the other. Brandt Supp. Decl., ¶ 24. Rather, they must be implemented concurrently, as is reflected by the required addition of these features in the dependent claims. *Id.* Sun's construction is therefore entirely consistent with the dependent claims, as the additional limitations of the dependent claims narrow claim 8. Accumed LLC v. Stryker Corp., 483 F.3d 800, 806 (Fed. Cir. 2007).

NetApp also invokes claim differentiation with respect to claims 9 and 10, asserting that claim 8 is identical in scope to dependent claims 9 and 10 under Sun's construction. NRB at 14-15. NetApp is wrong again. First, NetApp's argument violates long-standing Federal Circuit precedent limiting the doctrine of claim differentiation when applied to means-plus-function -12claims. *Nomos Corp. v. BrainLAB USA, Inc.*, 357 F.3d 1364, 1368 (Fed. Cir. 2004). Claim 9 recites a "means for recording multiple usage bits per block . . ." and claim 10 requires the "means" of claim 9 be a block map. '292 patent, col. 26:16-25. These limitations are properly construed as means-plus-function limitations pursuant to section 112(6). Therefore, it is inappropriate for NetApp to argue that the doctrine of claim differentiation requires the claimed meta-data of claim 8 be something broader than a block map. *Nomos*, 357 F.3d at 1368.

Second, NetApp is wrong that claim 8 is identical in scope to claims 9 and 10 under Sun's construction. The block map file of claim 8 may be arranged in any way. Brandt Supp. Decl., ¶ 20. Claim 9, however, expressly limits "the marking of said blocks" of claim 8 by requiring that the marking occur through placing entries in the block map. '292 patent, col. 26:16-21. NetApp acknowledges this additional limitation. NRB at 15. Claim 10 is even more narrow than claim 9 as it requires "multiple bit entries per block." *Id.*, col. 26:24-25. Accordingly, claim 8 is not coextensive with claims 9 and 10 under Sun's construction.

3. Sun's Construction Gives Proper Weight To The Claim Language And The Specification.

As established in Sun's opening brief, the specification repeatedly states "the present invention" uses a block map file, and no other embodiment is disclosed in the specification. Sun Br. at 11-13. NetApp does not – and cannot – deny either fact. Nevertheless, NetApp contends Sun's construction is improper. NRB at 15-16.

Sun's opening brief cites three recent Federal Circuit cases, decided in 2006, 2007 and 2008, holding that where, as here, the specification describes a single embodiment *and* describes a feature as being part of "the invention," the Court should limit the scope of the invention to that embodiment. Sun Br. at 12-13. Notably, NetApp's brief does not address this recent authority, much less attempt to distinguish it.

NetApp instead cites *Karlin Tech.*, *Inc. v. Surgical Dynamics*, *Inc.*, 177 F.3d 968, 973 (Fed. Cir. 1999), an earlier case readily distinguishable from the present case. *Karlin* involved a patent which "use[d] the terms 'present invention' and 'preferred embodiment' interchangeably." *Id.* There are no such mixed-messages in the '292 patent, which makes very clear the use of

-13-

5

7

9

11 12

14 15

13

16 17

18

19 20

21 22

23

24

26

25

27 28 block map files is a necessary feature of "the present invention." Sun Br. at 11-13.

The two District Court cases cited by NetApp also are readily distinguishable. In the first case, the Court noted the disputed limitation "is not consistently included throughout the specification." MGP Ingredients, Inc. v. Mars, Inc., 494 F. Supp. 2d 1231, 1237 (D. Kan. 2007). Here, by contrast, the use of a block map is consistently and exclusively featured in the specification, in addition to being repeatedly described as being part of "the present invention." The second case, Boston Scientific SciMed, Inc. v. ev3 Inc., 502 F. Supp. 2d 931, 940-43 (D. Minn. 2007), is distinguishable from the present case because in that case intrinsic evidence – other related patents sharing the same specification and the prosecution history – evidenced an intent by the patentee not to limit the scope of the claims. *Id.* at 942-43. Notably, even *Boston* Scientific states that characterizing a feature "as part of the 'present invention'" is "strong evidence" that the claims should not be read broadly. *Id.* at 942.

NetApp points to a single statement in the specification which notes that although "numerous specific details" are included in the 24 column specification, the invention may be practiced without all of the details. '292 patent, col. 5:36-45. There are, in fact, many details disclosed in the specification. However, the specification only identifies a few specific features as being part of "the present invention" – one of which is the use of the block map. As such, these fundamental features do not fall into the category of unnecessary "details."

NetApp also asserts the specification describes three different "functions" of the claimed invention. NRB at 16-17. However, it is undisputed the specification describes only a single embodiment of the claimed invention (which has three functions) and that this single embodiment only discloses the use of a block map file as the claimed "meta-data for successive states of the file system." As such, NetApp's observation is irrelevant.

NetApp's assertion that the block map file is "updated, but not copied" also is wrong. The patent teaches that the block map file is "updated by copying." *Id.*, col. 13:41-44, 21:53-56.

Finally, Sun notes NetApp offers no rebuttal to Sun's showing that the related '352 patent confirms the accuracy of Sun's construction. Sun Br. at 13-14.

C. "file system information structure"

The phrase "file system information structure" is not a term known to persons of ordinary skill in the file system art at the time of the '292 patent. Brandt Decl., ¶ 82. The declaration of Dr. Ganger, NetApp's technical expert, acquiesces to this fact, offering no evidence that the phrase bears any meaning outside of the '292 patent. Ganger Decl., ¶¶ 42-52. Absent an accepted meaning in the file system art, "file system information structure" must be construed with regard to the precise definition provided by the intrinsic evidence. *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (citing *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563, 1570 (Fed. Cir. 1997). Here, the claims and specification of the '292 patent unequivocally define the "file system information structure" as the "data structure that contains the root inode of a file in a fixed location on disk."

1. Only Sun's Construction Is Consistent With Claim 4.

NetApp's commitment to its claim construction is surprising given that it results in a claim that reads "said [data structure containing information about the layout of a file system] comprising data describing a layout of said file system" *See* Sun Br. at 17. NetApp does not dispute that this language is repetitive and amazingly argues, contrary to established Federal Circuit precedent, that it is proper to construe one claim term by using other language that "is drawn directly from the language of the claim itself." This is incorrect as a matter of law. *AllVoice Computing PLC v. Nuance Communications, Inc.*, 504 F.3d 1236, 1247-48 (Fed. Cir. 2007); *Mangosoft, Inc. v. Oracle Corp.*, 525 F.3d 1327, 1330-31 (Fed. Cir. 2008).

To no avail, NetApp attempts to distinguish the Federal Circuit precedent cited in Sun's opening brief, including the *Mangosoft* case. NRB at 19. In its argument, however, even NetApp recognizes that *Mangosoft* requires a proposed construction be rejected if it "simply restated an *implied relationship* between the other components of the system." NRB at 19 (emph. added); see *Mangosoft*, 525 F.3d at 1330-1331. Here, the circumstances of NetApp's proposed construction are even more egregious because its construction *merely restates* the *express* relationship between the "file system information structure" and "data describing a layout of said file system" explicitly recited in the claim. Sun's construction, on the other hand, recognizes that -15-

the claimed "file system information structure" requires more. Specifically the "file system information structure" is the "data structure that contains the root inode of a file system in a fixed location on disk." Brandt Decl., ¶ 77.

2. Only Sun's Construction Is Consistent With Claims 5, 6 And 7.

NetApp's argument that Sun's construction violates the doctrine of claim differentiation ignores meaningful differences in each of the claims that depend from claim 4. NRB at 19-20. The presence of *additional limitations* in claims 5, 6, and 7 properly differentiate these dependent claims from independent claim 4. Globetrotter Software v. Elan Computer Group, 236 F.3d 1363, 1369 (Fed. Cir. 2001) (holding that claim differentiation is observed where the "dependent claim [] recites an additional limitation that is not part of [the] independent [] from which it depends ..."). Here, NetApp admits that "[d]ependent claim 5 recites additional limitations for both storing steps in claim 4, namely (1) 'storing first and second copies ...' and (2) overwriting the first and second copies" NRB at 19. NetApp's reliance on claim 6 also is of no avail because claim 6 depends from claim 5 (with its additional limitations), so claim 6 also must have a different scope than claim 4.

Remarkably, what is not recited in any claim depending from claim 4 is a requirement that the *one* file system information structure be stored in a fixed location on disk when no copies are present. Brandt Supp. Decl., ¶ 33. In contrast to recitation of a *single* file system information structure in claim 4, the additional limitations of claim 5 add a requirement of *two* copies of the file system information structure. Thus, NetApp is incorrect that Sun's construction injects limitations from claim 5 into claim 4. It is significant, though, that claims 5 and 6 do confirm to one of ordinary skill in the art that each copy of the file system information structure must be at a fixed, predetermined *location*. Brandt Supp. Decl., ¶ 31-32.

3. Only Sun's Construction Is Consistent With The Specification Viewed From The Perspective Of Ordinary Skill In The Art.

As detailed in Sun's opening brief, the '292 patent uniformly describes the file system information (fsinfo) structure as comprising the root inode kept in a fixed location on disk. Sun Br. at 14-16. The file system information structure is defined in unequivocal and consistent terms

-16-

WEST\21484902.1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

within the '292 patent, for example:

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

- "Fsinfo block 2302 comprises the root inode." '292 patent, col. 16:6
- "Two identical copies of the fsinfo structure 1510 are kept in fixed locations on disk" '292 patent, col. 11:3-5.
- "The root inode is kept in a fixed location on disk referred to as the file system information (fsinfo) block" '292 patent, col. 9:33-36
- "The root inode 1510B of a file system is kept in a fixed location on disk [and] is part of the file system information (fsinfo) structure 1510" '292 patent, col. 10:58-64

In so stating, the '292 patent sets the outer boundaries of the "file system information structure" as a "data structure that contains the root inode of a file system in a fixed location on disk." Phillips v. AWH Corp., 415 F.3d 1303, 1315 (Fed. Cir. 2005); Bell Atlantic Network Servs. v. Covad Communications Group, Inc., 262 F.3d 1258, 1271 (Fed. Cir. 2001)("[W]hen a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term 'by implication.'").

NetApp attempts to camouflage the uniform meaning given the file system information structure by grafting miscellaneous information onto it. NRB at 18, 20. First, NetApp plays up miscellaneous information described as being optionally included within the file system information structure. '292 patent, col. 10:64-11:3. This optional data includes "the number of block in the file system, the creation time of the file system," and the check sum. '292 patent, col. 10:64-11:3. However, while this data is described as an option, the '292 patent evidences the clear intent to require the root inode. '292 patent, col. 11:1-3 ("Except for the root inode 1510B itself, this information [the number of blocks in the file system, the creation time of the file system, and the check sum data] 1510A can be kept in a meta-data file in an alternative embodiment.")(emph. added). The '292 patent uniformly requires the root inode be included within the fsinfo structure and be stored in a fixed location. *Id.*, col. 9:33-36, 10:58-64, 11:1-5.

Second, NetApp asserts that the file system information structure does not necessarily contain the root inode, and instead supposes that any data structure would suffice. NRB at 20. NetApp references a single sentence from the specification allowing the "root data structure" (not

-17-

WEST\21484902.1

the "root inode") to be "any data structure representative of an entire file system" NRB at 20 (citing '292 patent, col. 18:13-16). However, this sentence is not discussing the root inode, but is instead discussing the "snapshot inode." See '292 patent, col. 18:10-12 ("Each snapshot is represented by a snapshot inode that is similar to the representation of the active file system by a root inode."). Contrary to NetApp's mis-citation, the '292 patent consistently emphasizes the importance of the presence of the root inode within the file system information structure. '292 patent, Abstract, Figs. 7, 20C; col. 9:34-36, 10:63-65, 11:20-22, 12:26-37, 13:63-66, 16:6-9. In fact, even NetApp concedes that the "preferred embodiment contemplates that the fsinfo block includes a root inode" and points to no example of the fsinfo block that does not include the root inode. NRB at 20.

NetApp characterizes Sun's observation that the '292 patent equates the phrases "file system information structure," "fsinfo block," and "fsinfo structure" as a red herring. However, NetApp's response is the true distraction. NRB at 21. Specifically, regardless of whether they are synonymous, *both* the *fsinfo block* and the *fsinfo structure* are uniformly described as containing the root inode and being stored at a fixed location. '292 patent, col. 9:34-36, 10:57-60, 14:3-5.

NetApp supposes that the description of the file system information structure (as opposed to a file system information block) refers only to the data structure, and not to a location. NRB at 21. NetApp itself demonstrates the weakness of this point through two concessions and its failure to cite key passages of the specification. First, NetApp concedes "file system information structure" has only one meaning. *Id.* Second, NetApp concedes that the "'fsinfo block' is synonymous with 'fsinfo structure." *Id.* Sun agrees. Of even greater significance, however, NetApp fails to cite the salient portions of the specification where the file system information structure is confirmed to contain the root inode and reside at a fixed location on disk. '292 patent, Abstract, col. 10:57-65, 11:3-5, 12:26-32. Thus, the premise of NetApp's entire argument – that the fsinfo structure (as opposed to the fsinfo block) is not identified as being kept at a fixed location on the disk – is proven false by unambiguous statements in the specification such as: "[t]wo identical copies of the *fsinfo structure* 1510 are kept in *fixed locations* on disk." '292 –18-

patent, col. 11:3-5. This statement, and in fact the entirety of the '292 patent, uniformly demands that "file system information structure" mean a "data structure that contains the root inode of a file system in a fixed location on disk."

III. U.S. PATENT NO. 6,892,211

A. "pointing directly and indirectly to buffers in said memory and a second set of blocks on said storage system"

While NetApp accuses Sun of the shocking offense of applying a basic rule of English grammar (*i.e.*, that "and" is conjunctive and means "and"), NetApp throws out the rules altogether. Abandoning the rules of grammar, NetApp asserts "pointing directly *and* indirectly" means "pointing directly *or* indirectly."

NetApp argues that "[b]ecause Sun does not contend that the incore root inode must point in both ways to *each individual block or buffer*, Sun must concede that the first 'and' can contextually mean 'and/or." NRB at 23 (emph. in orig.). This is nonsense. While not all buffers in a consistent file system state need to be both directly and indirectly pointed to, the claim language plainly requires there be *at least one* buffer pointed to directly, and *at least one other* buffer pointed to indirectly. Brandt Supp. Decl., ¶¶ 36-40.

Ignoring the rules of claim construction, NetApp reads out whole swaths of the limitation in question. Under its construction, this carefully worded claim phrase, which expressly requires both direct and indirect pointing, and pointing to both buffers and blocks, loses virtually all meaning, in which any one of at least eight different conditions would be deemed to satisfy this limitation. Sun Br. at 21. For example, NetApp suggests that "buffers or blocks – either will do," meaning that "pointing directly to blocks" would by itself satisfy this claim limitation. NRB at 23:2-5. Doing so would impermissibly render superfluous the claim language regarding buffers. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). Likewise, NetApp's construction would permit "pointing indirectly to buffers" to satisfy this claim limitation, thereby turning the claim language regarding blocks (and the claim language regarding direct pointing) into "merely superfluous, nonlimiting elaboration," an approach to claim construction that has been rejected by the Federal Circuit. *Bicon Inc. v. Straumann Co.*, 441 F.3d –19-

945, 950 (Fed. Cir. 2006).

1. NetApp Rewrites Plain Claim Language.

NetApp's proposed construction amounts to a wholesale rewriting of the claim language. NetApp's position is that the incore root inode need not even point to *both* buffers *and* blocks, let alone point to each directly and indirectly. In NetApp's own words: "The disputed limitation requires that there be some locations for the computer data in question (*i.e.*, buffers and blocks either will do, both is normal) and pointers that point to them (direct or indirect – either will do, but again, both is normal). As long as this condition is met, the disputed term is satisfied." NRB at 23:2-5. Thus, NetApp views the claims' detailed recitations of buffers and blocks and their relationship with the incore root inode (being pointed to directly and indirectly) as inconsequential flourishes of the claim drafter's pen, to be ignored at NetApp's convenience.

If NetApp were correct, there would be no need for the '211 patentees to specifically claim types of data locations (buffers and blocks) or types of addressing (direct and indirect). The claims could have simply claimed an "incore root inode pointing to data locations in memory and on said storage system" – precisely what NetApp apparently wishes the claims *had* claimed. However, it is well settled that "[a] patentee may not proffer an interpretation for the purposes of litigation that would alter the indisputable public record consisting of the claims, the specification and the prosecution history, and treat the claims as a 'nose of wax.'" *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1578 (Fed. Cir. 1995). Each claim term is presumed to have meaning and cannot be willy-nilly read out of the claim, as NetApp is attempting to do. *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1119 (Fed. Cir. 2004) (refusing to construe a claim so as to read out an element), *Bicon*, 441 F.3d at 950. For this reason, the Court should reject NetApp's invitation to redraw the claim language at issue. *Quantum Corp. v. Rodime, Plc.*, 65 F.3d 1577, 1584 (Fed. Cir. 1996) ("courts do not redraft claims"); *Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1563 (Fed. Cir. 1995) ("we are not free to read the claims as they might have been drafted") (Plager, J., concurring).

2. The Claim Language Cited By NetApp Supports Sun's Construction.

The very claim language that NetApp relies upon to support its untenable construction -20-

shows that Sun's construction is correct. NetApp invites the Court to consider claim language surrounding the disputed term, specifically the requirement that "said buffers *and* said second set of blocks stor[e] data and metadata for a second consistent state of said file system." '211 patent, col. 24:4-6, 24:55-57, 25:37-39 (emph. added); NRB at 24. Remarkably, NetApp states that the first "and" in this claim language "*establish[es] a single combined group*" of "buffers and second set of blocks," together "represent[ing] the second consistent state of the file system." NRB at 24:17-21 (emph. added). This, of course, means that NetApp recognizes that this "and" is truly an "and" and not an "and/or" because an "and/or" would break up the group into two parts. Apparently, NetApp recognizes what "and" really means in the claims when it is not inconvenient to NetApp's infringement position. In this regard, NetApp's construction would result in the same term – "and" – being used inconsistently in the same claim, which would be error. *Fin Control Sys. Pty, Ltd. v. OAM, Inc.*, 265 F.3d 1311, 1319 (Fed. Cir. 2001).

3. NetApp's Construction Is Not Supported By The Specification.

NetApp claims its construction finds support in the specification, but never actually cites to the specification. NRB at 25-26. This omission is not surprising – the specification provides **no** support for NetApp's construction. As explained in Sun's opening brief, the specification teaches that the claimed incore root inode *always* points directly to the buffers of the inode file *and* indirectly to all other buffers (such as the blockmap and inomap file buffers comprising the claimed file system metadata and buffers storing regular files), *as well as* pointing directly to the unchanged blocks of the inode file on disk *and* pointing indirectly to all other unchanged blocks. Sun Br. at 22-25.

Unable to rely on the specification, NetApp turns to two purported examples provided by its expert, Dr. Ganger. NRB at 25, *citing to* Ganger Decl., ¶¶ 64-65. Even a cursory review of these examples confirms that they are not disclosed in the specification, but are merely Dr. Ganger's *testimony* about how the claimed file system *might* operate under certain conditions. Unlike express disclosure in the specification, which the law treats as reliable intrinsic evidence, such expert testimony is extrinsic evidence and always carries less weight. *Phillips*, 415 F.3d at 1317-19. Furthermore, Dr. Ganger's testimony cannot be used to contradict a claim construction -21-

mandated by the intrinsic evidence. *Id.* at 1318. In any event, the examples provided by Dr. Ganger are incorrect. Brandt Supp. Decl., ¶¶ 41-42.

Having failed to cite any intrinsic evidence to support its untenable construction, NetApp turns to case law. NetApp cites *Ortho-McNeil Pharm. v. Mylan Labs., Inc.*, 520 F.3d 1358 (Fed. Cir. 2008) for the proposition that reading "and" as an "and" is not required. NRB at 25. *Ortho* cannot help NetApp. In *Ortho*, the Federal Circuit construed the term "and" to mean "or" "in the circumstances of th[at] case" because construing "and" in the conjunctive "would render several dependent claims meaningless." *Id.* at 1362. In reaching its conclusion, the Federal Circuit was particularly concerned with the tenet of claim construction that the Court should "strive[] to reach a claim construction that does not render claim language in dependent claims meaningless." *Id.*

None of the predicates for applying *Ortho* are present here. Construing "and" in the conjunctive in the '211 patent does not render any dependent claim meaningless, and does not violate any tenet of claim construction. To the contrary, construing "and" as an "or" in the context of the '211 patent violates several claim construction rules, as discussed above. Simply put, the intrinsic evidence here establishes that the term "and" was meant to be read in the conjunctive and nothing in *Ortho* can alter that conclusion.

B. "root inode"

Sun's construction of "root inode" correctly recognizes both the meaning of the term "root" – something is "rooted" in a fixed location – and the specification's uniform description of the "root inode" as being stored at a fixed location so as to permit the file system to access its written-anywhere files (without which access the file system would be non-functional). '211 patent, col. 9:25-35, 10:58-11:5. NetApp ignores this fundamental role of the root inode. Its purported justifications for doing so lack merit.

1. Any Distinction Between The Incore And On-Disk Root Inodes Is Irrelevant For Claim Construction.

NetApp first identifies a purported distinction between the "on-disk" and the "incore" root inodes. NRB at 28. NetApp makes the unremarkable observation that the "incore" root inode is stored in a buffer structure that is not located in a fixed location in *memory* and includes

-22-

WEST\21484902.1

structures that are absent from the "on-disk" root inode. *Id.* NetApp concludes from this that Sun's proposed construction, because it requires the root inode to be in a fixed location, is too narrow to accommodate the incore root inode. *Id.* NetApp's reasoning is faulty because it assumes a false dichotomy between the on-disk and incore root inodes.

The incore root inode is a temporary *in-memory copy* of the on-disk root inode. Brandt Supp. Decl., ¶ 45; '211 patent, col. 6:55-61. Because one of skill in the art understands this, he or she readily appreciates that, under Sun's correct construction, the incore root inode is an inmemory *copy* of the "index node data structure stored in a fixed location that roots a set of self-consistent blocks on the storage system that comprise the file system" (Sun's construction of "root inode"). Brandt Supp. Decl., ¶ 45. In other words, while a *copy* of the root inode is stored in memory, *there always is a root inode stored in a fixed position on the disk*. Sun's construction correctly captures this fact, while NetApp's construction does not require *any* inode to be "rooted" anywhere. The fact that the incore *copy* of the on-disk inode also has additional structure to reference buffers is irrelevant. *Id*.

2. NetApp's Arguments Regarding The fsinfo Structure Are Irrelevant.

NetApp also "incorporates by reference" its arguments regarding the term "file system information structure" in the '292 patent. NRB at 27, 29. However, the "fsinfo structure" is not a limitation in any '211 patent claims. Under Sun's correct construction, the fsinfo structure in the '292 patent stores the root inode in a fixed place on disk. NetApp's position, however, is that the fsinfo structure does not need to contain a root inode. NRB at 20. NetApp cannot reasonably maintain that its arguments regarding the "fsinfo structure" are relevant to the construction of "root inode" when it denies the root inode needs to be present in the fsinfo structure.

3. NetApp's Construction Is Not Supported By The Specification.

NetApp incorrectly asserts the specification discloses a root inode not stored in a fixed location. In fact, NetApp does not and cannot point to a single place in the specification that teaches a file system root inode stored in a non-fixed location.

Instead, NetApp once again cites the testimony of its expert Dr. Ganger – testimony wholly divorced from the intrinsic record. NRB at 29, *citing to* Ganger Decl., ¶¶ 79-80. Dr.

-23-

WEST\21484902.1

Ganger's opinion, repeated by NetApp in its brief, is that a person of ordinary skill in the art would know of other mechanisms of ensuring that the root inode can be located. However, Dr. Ganger provides no basis for his opinion, not in the claims, not in the specification, and not even in an extrinsic publication. What's more, Dr. Ganger's hypothetical example would not be operable in the context of the patented invention. Brandt Supp. Decl., ¶¶ 46-48. Dr. Ganger's testimony must therefore be given no weight. Biagro Western Sales, Inc. v. Grow More, Inc., 423 F.3d 1296, 1303-04 (Fed. Cir. 2005) (rejecting expert testimony where patentee "cannot tie [the] extrinsic evidence to the patent or the claim language."); Network Commerce, Inc. v. Microsoft Corp., 422 F.3d 1353, 1361 (Fed. Cir. 2005) (rejecting expert testimony that was not supported with any references to industry publications or other independent sources and was at odds with the intrinsic evidence).

Desperate to find any disclosure of a root inode not in a fixed location, NetApp and its expert turn to the specification's description of snapshot inodes. NRB at 29-30. This is another red herring. Snapshots are created in part by making a copy of the root inode. *Id.*, col. 18:6-8. This copy is referred to as a "snapshot inode": "Each snapshot is represented by a snapshot inode that is similar to the representation of the active file system by a root inode." Id., col. 18:3-5 (emph. added). By using a different name for this inode, the specification makes it absolutely clear that it is not the same structure as the claimed root inode. Brandt Supp. Decl., ¶ 49. Indeed, as shown in '211 patent Fig. 22, snapshot inodes reside in the inode file alongside all the other regular inodes. *Id.* at ¶ 50. Therefore, snapshot inodes are part of the claimed "metadata" pointed to directly and indirectly by the root inode (residing in the fsinfo block in Fig. 22) and are certainly not themselves the claimed root inode. *Id*.

Furthermore, the claims of the '211 patent are directed to an active file system that is evolving from a first consistent state to a second consistent state. Brandt Supp. Decl., ¶ 51. Snapshots, however, are not an active file system. The specification distinguishes between the active file system, which can be written to, and a snapshot, which it describes as a "read-only" copy of an entire file system at a given instant when the snapshot is created. '211 patent, col. 17:59-61, Brandt Supp. Decl., ¶ 51. Because a snapshot inode is a distinct structure rooting a -24-

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

read-only copy of a file system, its properties are irrelevant to the proper construction of the root inode, which roots the active file system claimed in the '211 patent. Brandt Supp. Decl., ¶ 51.

4. Sun's Construction Recognizes True Scope Of Claimed Invention.

NetApp cannot run from the clear teaching of the specification. Claim construction requires an inquiry into "whether the specification read as a whole suggests that the very character of the invention requires the limitation to be a part of every embodiment." *Alloc, Inc. v. Int'l Trade Com'n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003) Here, the specification teaches that the very nature of a write-anywhere file system layout requires the root inode be in a fixed location. '211 patent, col. 9:27-36. The specification distinguishes the inode file of the invention from prior art inode tables on the ground that the inode file is written *anywhere* on disk. *Id.* It is this alleged difference over the prior art that necessitates the existence of the claimed root inode – the root inode must necessarily be in a fixed location to locate the write-anywhere inode file. *Id.*; Brandt Supp. Decl. ¶ 44.

Sun's construction correctly recognizes the fundamental fact that "the patent[] do[es] not show or suggest any systems without" a root inode in a fixed location. *Alloc*, 342 F.3d at 1370. NetApp's construction, on the other hand, impermissibly broadens the claims well beyond what is set forth in the specification. *On Demand*, 442 F.3d at 1340 ("[T]he claims cannot be of broader scope than the invention that is set forth in the specification.").

In fact, NetApp's construction is no construction at all. NetApp merely incorrectly restates the claim language. Where the claims require the root inode to "point[] directly *and* indirectly" to a "consistent state of said file system," NetApp construes root inode as "an inode that points directly *or* indirectly to . . . a consistent state of a 'file system.'" Thus, other than incorrectly changing an "and" to an "or," NetApp does not ascribe the root inode any meaning not already ascribed to it by the rest of the claim language. The Federal Circuit rejects such constructions. *Mangosoft*, 525 F.3d at 1330-31 (rejecting construction that "ascribes no meaning to the term 'local' not already implicit in the rest of the claim.").

Because Sun's construction requiring the root inode to be in a fixed location correctly captures an aspect of the claimed technology inherent in the "very character of the invention,"

-25-

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Alloc, 342 F.3d at 1370, NetApp's citation to nCube Corp v. SeaChange Int'l, Inc., 436 F.3d 1317, 1322 (Fed. Cir. 2006) is inapposite. In that case, the Federal Circuit rejected a construction that read in a limitation from a dependent claim. *Id.* Here, Sun's construction does not read in limitations, but gives the invention the full scope that is set forth in the written description. On Demand, 442 F.3d at 1340.

"state of a file system" / "consistent state" C.

The significant difference between the parties' constructions is NetApp's inclusion of the phrase "rooted by a 'root inode." Sun's construction comes straight from a definition in NetApp's related '352 patent. Having used that definition in its own related patent, NetApp's criticism of Sun's reliance on it is, to say the least, questionable.

More important, though, is that NetApp's construction is contrary to the claims. Taking the on-disk root inode as an example, the claims require it to reference (by pointing directly and indirectly) a "first set of blocks on said storage system that store a first consistent state of said file system." '211 patent, col. 23:64-67. Thus, the claim language contemplates a structure A (the on-disk root inode) referencing a structure B (the set of blocks storing a consistent state of the file system). NetApp's construction turns this relationship on its head by including structure A within structure B. In fact, as explained at page 28 of Sun's opening brief, NetApp's inclusion of "root inode" in its construction of "consistent state" renders the claims incomprehensible.

NetApp's construction also hopelessly confuses two related but distinct concepts, "consistent state" and "consistency point," which NetApp insists should be construed to have the same meaning, thereby treating them as interchangeable. NRB at 31. NetApp is wrong because the claim language and the specification distinguish these two concepts. Tandon Corp. v. U.S. Int'l Trade Com'n, 831 F.2d 1017, 1023 (Fed. Cir. 1987) ("There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims.").

While the term "consistent state" appears in the '211 patent, "consistency point" does not. ("State of a file system," which the parties agree should be construed the same as "consistent state," appears in claim 8 of the '292 patent.) Instead, "consistency point" is claimed in claim 4 of the '292 patent. The specification teaches that a "consistency point" is "[t]he set of self-

-26-

consistent blocks on disk that is rooted by the root inode." '211 patent, col. 4:17-19; '292 patent, col. 4:12-14. In other words, a "consistency point" occurs when a file system in a "consistent state" on disk is rooted by a root inode. Brandt Supp. Decl., ¶ 53; '211 patent, col. 4:21-25. Consistent with this teaching, in claim 4 of the '292 patent, the file system stays at a "first consistency point" until a new fsinfo structure is stored. '292 patent, col. 25:16-27; Brandt Supp. Decl., ¶ 53.

Under NetApp's construction, the first and second "consistent states" in the '211 patent may be replaced with "consistency points" as NetApp defines them to be the same. However, the first and second "consistent states" in the '211 patent are not first and second "consistency points." Rather, the claimed *second* consistent *state* (rooted by the incore root inode) is achieved while the file system is still at a *first* consistency *point* (the "first set of blocks" storing a consistent state rooted by the on-disk root inode). The process claimed in the '211 patent occurs in between the consistency points of the '292 claim 4. Brandt Supp. Decl., ¶ 54. In the file system of the '211 patent, the on-disk root inode has not yet been updated with the incore root inode and the file system changes are still stored in buffers in memory. Brandt Supp. Decl., ¶ 54-55; '211 patent, col. 24:8-11. This means that the incore root inode in the '211 patent roots a second consistent *state* ('211 patent, col. 24:5-6) comprised of buffers and blocks, but is not at a second consistency *point* – the file system is still at the first consistency point. Brandt Supp. Decl., ¶ 54-55.

NetApp's insistence that "consistency point" and "consistent state" / "state of a file system" are to be construed the same creates problems with claim 8 of the '292 patent as well. As explained above, while the term "consistency point" appears as a claim term in claim 4 of the '292 patent, it does not appear in claim 8 of that patent (where the term "state[s] of a file system" appears). Furthermore, the term "root inode" also is not present in '292 patent claim 8. By offering a construction of "state[s] of a file system" that is identical to its construction of "consistency point" in '292 claim 4 and that incorporates NetApp's construction of "root inode" from the '211 patent, NetApp is reading both of these limitations into claim 8 of the '292 patent. NetApp does so even though the term "root inode" is a limitation in '292 patent dependent claim -27-

19. The law is well settled that this is improper. Amgen Inc. v. Hoechst Marion Roussel, Inc.,

314 F.3d 1313, 1326 (Fed. Cir. 2003) ("Our court has made clear that when a patent claim does

not contain a certain limitation and another claim does, that limitation cannot be read into the

former claim in determining either validity or infringement.") (internal citation omitted). IV. U.S. PATENT NO. 7,200,715.

7

"associating the data blocks with one or more storage blocks across the Α. plurality of stripes as an association" / "the association to associate the data blocks with one or more storage blocks across the plurality of stripes"

8

1. The Claims Are Indefinite Under 35 U.S.C. §112(2).

9

10

11

12

In analyzing indefiniteness, the words used in the claims are presumed to mean what they say and the Court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant art. Honeywell Int'l Inc. v. Int'l Trade Comm'n, 341 F.3d 1332, 1339 (Fed. Cir. 2003). When the words of these particular claims are given their full range of ordinary meaning, the claims undoubtedly recite an impossible situation and, therefore, are insolubly ambiguous and do not allow one of ordinary skill in the art to determine whether a particular product infringes. Brandt Supp. Decl., ¶¶ 66-67. The terms are therefore invalid under

14

15

13

16 section 112(2). Geneva Pharms., Inc. v. GlaxoSmithKline PLC, 349 F.3d 1373, 1384 (Fed. Cir. 2003); Novo Indust., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1358 (Fed. Cir. 2003).

17

18

19 20

21

22 23

24

25 26

27

28

The parties agree a "storage block" cannot exist across a "plurality of stripes." Indeed, NetApp twice admits "one of ordinary skill in the art would understand that a single storage block will not exist on multiple stripes at the same time...." NRB at 35, 38. Yet, the claims, as actually written, cover this impossible situation. Specifically, when given their ordinary meaning, the claims cover two situations: (i) associating "data blocks" with a single storage block across multiple stripes as an association; and (ii) associating the data blocks over more than one storage block across a plurality of stripes as an association. Brandt Supp. Decl., ¶ 67. Because the claims use the term "or," either situation satisfies this claim limitation. Schumer v. Lab. Computer Sys., 308 F.3d 1304, 1311-12 (Fed. Cir. 2002). Because a stripe consists of multiple storage blocks and any one storage block cannot exist across multiple stripes, the first of the two situations states an impossibility. Brandt Supp. Decl., ¶ 67. Therefore, the claim is insolubly ambiguous and one -28of ordinary skill in the art is unable to determine whether a particular product infringes the claims, rendering the claims invalid. Geneva Pharms, 349 F.3d at 1384; Novo Indust., 350 F.3d at 1358; Brandt Supp. Decl., ¶ 67. 2.

NetApp's Arguments Confirm The Claims Are Indefinite.

In an attempt to salvage the claims, NetApp presents arguments confirming the claims are indefinite. NetApp argues that "because the claim requires an 'association' capable of mapping data blocks to storage blocks 'across a plurality of stripes,' one of ordinary skill in the art would understand that the term 'one or more' covers a degenerate (abnormal) case only [in which the association is only a single storage block on a single stripe], because, in practical terms using more than one stripe, and therefore more than one storage block, is an important feature of the data structure being defined as an association." NRB at 35 (emph. added). NetApp goes on to argue that the specification describes an "association" as a data structure that includes storage blocks across multiple stripes and that this ability to perform multiple stripe writes differentiates it from the prior art and "strictly requires 'an association' that includes blocks from multiple stripes." NRB at 36-38 (emph. added); see also NRB at 37 ("The specification distinguishes the prior art on the basis of the prior art not generally carrying out writes to multiple stripes."). Thus, under NetApp's own reasoning, the so-called "degenerate" case – which NetApp asserts is recited in the claims – does not differentiate NetApp's alleged invention from the prior art.

These arguments confirm the claims are indefinite. NetApp admits the claimed "association" must include storage blocks across multiple stripes because this is an "important feature" of the invention that differentiates it from the prior art. Indeed, the express claim language requires storage blocks "across the plurality of stripes." Yet, at the same time, NetApp argues the claims cover a "degenerate" case where the association is only a single storage block on a single stripe, a position that is both contrary to the "plurality of stripes" claim language and which places the claim into the prior art.

Finding itself in this untenable position, NetApp is forced to argue that the claims cover any association that either (1) does include or (2) is capable of including multiple storage blocks across multiple stripes. See, e.g., NRB at 35 ("association' capable of mapping data blocks to -29-

WEST\21484902.1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

storage blocks 'across the plurality of stripes'"), 36 ("NetApp's proposed constructions . . . convey that, in the normal case, blocks from multiple stripes are in each 'association'"). This argument is illustrated in NetApp's "McDonalds" analogy as "diners" practicing the claim by "planning to eat at more than one McDonald's, and if we do, they will probably be in more than one state – but it's possible we will eat at only one McDonald's." NRB at 39 (emph. in orig.) Thus, under NetApp's view, as long as a storage system might associate data blocks with more than one storage block across a plurality of stripes – even if the system never does so and, instead, always utilizes only one storage block on one stripe – the system practices the claims of the '715 patent. The fatal problem with this position is, of course, that it (1) ignores and contradicts the plain meaning of the actual claim language, (2) attempts to import a "capable of" limitation into the claim, and (3) would result in infringement by a system practicing the prior art. The Court may not "fix" this problem with NetApp's patent by rewriting the claims through claim construction to save the validity of the patent. Allen Eng'g, 299 F.3d at 1349 ("It is not [the Court's] function to rewrite claims to preserve their validity.").

The claims also are indefinite as a matter of law because (1) NetApp admits the invention "strictly requires" an association of multiple storage blocks across multiple stripes in order to differentiate it from the prior art, but (2) the claims do not require this. As the Federal Circuit recently noted: "The Supreme Court has stated that '[t]he statutory requirement of particularity and distinctness in claims is met only when [the claims] clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise." *Halliburton Energy Serv., Inc. v. M-I, LLC,* 514 F.3d 1244, 1249 (Fed. Cir. 2008), *citing United Carbon Co. v. Binney & Smith Co.,* 317 U.S. 228, 236, 63 S.Ct. 165, 87 L.Ed. 232 (1942).

NetApp admits the invention "strictly requires" an association of multiple storage blocks across multiple stripes of an array, which purportedly distinguishes the '715 patent from the prior art. NRB at 35-38. These admissions are not only in NetApp's brief, but also were repeatedly made during prosecution of the patent, when NetApp urged the PTO to allow the claims because the prior art did not teach mapping or associating "each data block with a respective one of the storage blocks across a plurality of stripes." Sun Br. at 35-37. This "strict requirement," -30-

however, is missing from claims 21, 39 and 52. Instead, claims 21, 39 and 52 all are written to cover a case where the association consists of only a single storage block. NRB at 35, 39. The claims are therefore invalid for indefiniteness. *Halliburton*, 514 F.3d at 1256. The claims also are invalid because the invention set forth in the claims is not what the specification describes (*i.e.*, the use of multiple storage bocks across multiple stripes). *Allen Eng'g*, 299 F.3d at 1349.

3. Sun's Alternative Construction Is The Only Construction Consistent With The Specification.

The Court should find the claim indefinite. However, if the Court concludes the claim language is not indefinite, the intrinsic evidence requires the terms be construed as "associating each data block with a respective one of the storage blocks across the plurality of stripes" (Sun's proposed construction).

The specification defines a "stripe" as "one storage block on each disk drive in an array of drives in the system." '715 patent, col. 1:37-39 (emph. added). This definition is consistent with the definition of the term as it is understood to those skilled in the art. Brandt Supp. Decl., ¶ 58. Beginning at the Abstract and continuing throughout the specification, the '715 patent repeatedly and exclusively describes the association of data blocks to storage blocks as a one-to-one correspondence, i.e., each data block is associated with a respective one of the storage blocks. '715 patent, Abstract; col. 9:16-19; col. 13:2-5, 20-22, 37-39; Brandt Supp. Decl., ¶ 69. This one-to-one association is the only type of association described in the '715 patent. *Id.* Not surprisingly, Dr. Ganger and NetApp do not (and cannot) cite to a single example in the specification of data blocks associating with storage blocks on something other than a one-to-one basis correspondence. Thus, Sun's alternate construction is proper, and NetApp's construction, which ignores the specification and attempts to cover a generic "data structure" not contemplated by the '715 patent, is not. *See, e.g., Miken*, 515 F.3d at 1338.

Furthermore, NetApp's attempt to replace the claim term "storage blocks" with the more general term "locations" has no basis in the specification, file history or in the field of art. Brandt Supp. Decl., ¶ 70. Both the specification and the prosecution history clearly define stripes in terms of storage blocks and require a one-to-one mapping of data blocks to storage blocks.

-31-

Brandt Supp. Decl., ¶ 70. NetApp's construction must be rejected for this reason as well.

4. The Prosecution History Supports Sun's Construction.

Consistent with the explicit teachings of the specification, NetApp stressed during prosecution of the '715 patent that the allegedly novel "association" required a one-to-one mapping of data blocks to storage blocks over a plurality of stripes. In at least three different amendments, NetApp urged the Patent Office to allow the claims because the prior art did not teach "mapping" or associating "each data block with a respective one of the storage blocks" across a plurality of stripes. Sun Br. at 35-37. NetApp made this argument with respect to all of the claims, including claims 21, 39 and 52. Furthermore, the Examiner agreed and allowed claims 21, 39 and 52 for this very reason – i.e., because the prior art allegedly lacked "associating each [of the] data blocks to be stored with a respective one of the storage blocks across the plurality of stripes for a single write operation." Williamson Decl., Ex. J, p. 2; see also Supp. Williamson Decl., Ex. 1. NetApp's repeated disclaimers are both clear and unmistakable.

NetApp's current response to its prior repeated disclaimers can be summarized as follows:

(1) it did not state this limitation is a requirement of every claim; and (2) this limitation was unnecessary to overcome the prior art. NetApp is wrong on both counts. First, NetApp did represent to the PTO that associating each data block with a respective one storage block was required by all pending claims. Indeed, NetApp twice urged that all pending claims—including claims 21, 39 and 52—were allowable over the prior art because "the absence ... of Applicant's 'associating each data block with a respective one of the storage blocks, for transmitting the association to a storage device manager for processing of the single write transaction."

Williamson Decl., Ex. I, p. 15 (emph. in orig.). Thus, NetApp's first response is baseless.

NetApp's second response, *i.e.*, that the disclaimer was unnecessary, is disingenuous at best. In every substantive amendment NetApp filed during the prosecution of the '715 patent, it distinguished the claimed inventions from the prior art precisely because the prior art did not disclose mapping or associating *each data block with a respective one of the storage blocks* across a plurality of stripes. *See*, *e.g.*, Williamson Decl., Ex. F, pp. 17-18; Ex. H, p. 20; Ex. I, p. 15. Furthermore, NetApp repeatedly urged that *all* claims should be allowed because *associating* -32-

each data block with a respective one of the storage blocks was not in the prior art. Whether NetApp could have made different arguments with respect to claims 21, 39 and 52 is irrelevant because it chose not to do so.

NetApp cites one isolated statement in the file history suggesting it made a broader argument concerning the association, namely, that "DeKoning does not address associating data blocks with storage blocks, but instead merely discusses the use of buffering ..." Williamson Decl., Ex. F, p. 18. However, surrounding this isolated statement are more specific statements describing the associating function in the claims as "associating each data block with a respective one of the storage blocks, for transmitting the association to a storage device manager for processing of the single write transaction" and "associating each data block of the single write request with a storage block of the storage system" *Id.* at p. 17 (emph. in orig.). Importantly, when arguing that DeKoning was "legally precluded" from anticipating the claims, NetApp cited the absence of "associating each data block with a respective one of the storage blocks, for transmitting the association to a storage device manager for processing of the single write transaction." Id. at p. 18 (emph. in orig.). Thus, it was the more specific one-to-one association that NetApp stressed and used to distinguish the claims from the prior art. Additionally, the Examiner never agreed with NetApp's broader assertion (i.e., that DeKoning does not disclose any type of association), but instead, allowed the claims because he determined DeKoning did not disclose the specific one-to-one association that NetApp argued was present in all of the claims. Williamson Decl., Ex. J (Notice of Allowability), p. 2.

Furthermore, even if, assuming arguendo, NetApp's disclaimer was not necessary to overcome the prior art, it was NetApp's duty to correct the record. Springs Window Fashions LP v. Novo Indust., L.P., 323 F.3d 989, 995 (Fed. Cir. 2003) ("If the applicant mistakenly disclaimed coverage of the claimed invention, then the applicant should have amended the file to reflect the error, as the applicant is the party in the best position to do so."). Instead of doing so, NetApp chose to argue on the public record that all claims were distinguishable over the prior art because they include a one-to-one association of data blocks to storage blocks, and chose to allow that record to stand. "The prosecution history constitutes a public record of the patentee's

-33-

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

(Case 3:07-cv-06053-EDL Document 125 Filed 08/01/2008 Page 41 of 41
1	representations concerning the scope and the meaning of the claims, and competitors are entitled
2	to rely on those representations when ascertaining the degree of lawful conduct." <i>Id.</i> at 995
3	(citations omitted). Because NetApp argued that all claims required associating each data block
4	with a respective one of the storage blocks, the public notice function of a patent and its
5	prosecution history demands that the claims be limited to systems including that limitation. <i>Id</i> .
6	V. CONCLUSION
7	For the above reasons, Sun requests the Court adopt its proposed constructions.
8	Dated: August 1, 2008 DLA PIPER US LLP
9	Dr. /a/Mark Famler
10	By /s/ Mark Fowler Mark D. Fowler
11	Attorneys for Defendant and Counterclaim Plaintiff
12	SUN MICROSYSTEMS, INC.
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	-34-
DLA PIPER US LLP	WEST\21484902.1 SUN'S REPLY CLAIM CONSTRUCTION BRIEF CASE NO. C 07-06053 EDL